

Rhagodia acicularis (Chenopodiaceae), a new species from the Wongan Hills, Western Australia

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Abstract

Paul G. Wilson, *Rhagodia acicularis* (Chenopodiaceae) a new species from the Wongan Hills, Western Australia. Nuytsia 4(1): 51-54 (1982). A new species, *Rhagodia acicularis*, is described; it is endemic to the Wongan Hills, Western Australia. A new combination is effected for a close relative *R. ulicina* (Gand.) Paul G. Wilson (*Chenopodium ulicinum* Gand.).

Recent collecting activity in the Wongan Hills, Western Australia, had brought to light an undescribed *Rhagodia* which closely resembles *R. ulicina* (Gand.) Paul G. Wilson. The latter had been placed in the genus *Chenopodium* but both it and the newly described species clearly belong in *Rhagodia*.

Rhagodia acicularis Paul G. Wilson, sp. nov. (Figures 1 and 2)

Frutex compactus c. 0.5 m altus, furfuraceus. *Folia* alterna, parva, angusti elliptica, 2-5 mm longa, aliquantum carnosae, vesiculariter furfuracea. *Inflorescentia* spicata (vel breviter paniculata), c. 10 mm longa; flores pauci, parvi, sessiles, minute bracteati. *Flores* masculi late turbinati c. 1 mm longi; *tepala* 5; *stamina* 5, filamentis anguste teretibus versus basim lanatis; *pistillodium* minutum. *Flores* feminei spheroides c. 1.2 mm diam.; *staminodia* absentia; *ovarium* glabrum; *stigmata* tenuia, papillosa, c. 0.3 mm longa. *Fructus* baccatus, depresso sphericus, c. 3 mm diam.; pericarpium succulentum, roseum. *Semen* lenticulare 1.5 mm diam., radialiter verruculosum, nigrum, margine rotundato.

Typus: Monk's Well Gully, Wongan Hills, 30°46'S, 116°38'E, Western Australia, 15 Feb. 1980, P. G. Wilson 11713 (holo: PERTH; iso: CANB).

Compact intricately branched rounded *shrub* c. 0.5 m high, scurfy due to a close covering of minute vesicular hairs which although collapsing retain their circular shape with age, dioecious. *Branchlets* spinescent. *Leaves* alternate, small, somewhat fleshy, narrowly elliptic, 2-5 mm long, glabrescent above, closely vesicular puberulous below. *Inflorescence* spicate (or shortly paniculate) with a spinescent axis c. 10 mm long; *flowers* few, sessile, subtended by a minute bract. *Male flowers* broadly turbinate, c. 1 mm long; *tepals* 5, free to base, narrowly obovate, incurved, closely vesicular hairy outside, glabrous within; *stamens* 5, filaments slender-terete, lanate towards base, united into a thick cup-shaped disc; *anthers* shortly exerted, c. 0.5 mm long; *pistillode* minute. *Female flowers* spheroidal, c. 1.2 mm diam.; *tepals* narrowly obovate not enlarging in fruit; *staminodes* absent; *ovary* glabrous; *style* minute; *stigmas* slender, papillose, c. 0.3 mm long. *Terminal flower* on female inflorescence sterile, densely filled with woolly hairs arising from staminodes;

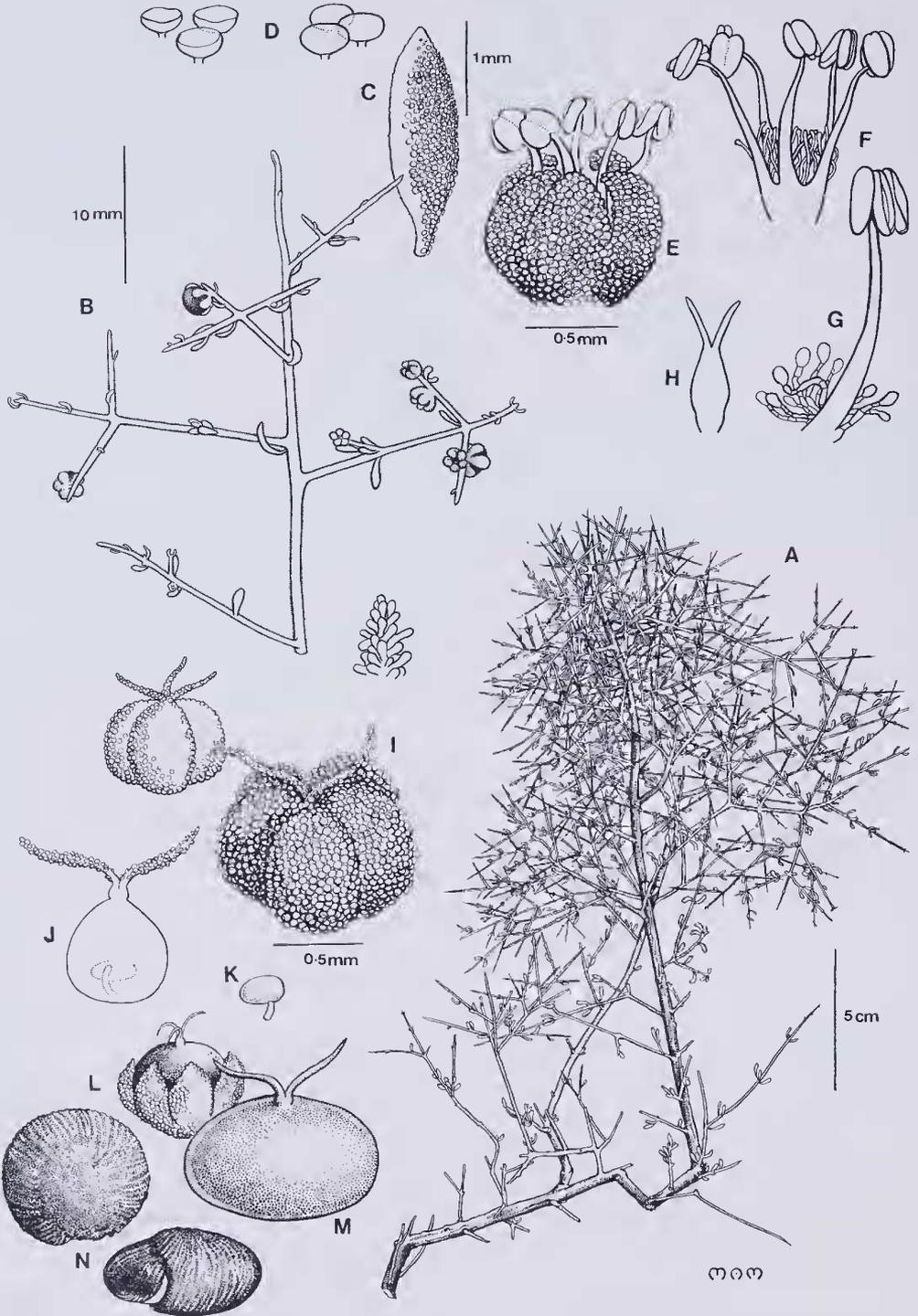


Figure 1. *Rhagodia acicularis*. A—habit. B—female branch. C—young leaf. D—vesicular hairs, inflated (right) and collapsed (left). E—male flower. F—androecium. G—stamen. H—pistillode. I—female flower. J—ovary. K—ovule. L—perianth with fruit. M—berry. N—seed, from above and side.

From K. F. Kenneally 2384 (male) and P. G. Wilson 11713 (female).

pistillode minute with 2-3 erect glabrous stigmas. *Fruit* baccate, depressed spherical, c. 3 mm diameter, pale red, clasped around margin by tepals but exposed at apex and towards base in inter-tepalar spaces; *pericarp* succulent, adherent to seed. *Seed* lenticular with rounded margin, 1.5 mm diam., radially verruculose, black.

Additional specimens examined. WESTERN AUSTRALIA: Wongan Hills, K. F. Kenneally 2384 and 6448 (PERTH); *ibid.*, P. G. Wilson 11712 (PERTH).

Distribution. Endemic to the Wongan Hills, c. 30°50'S, 116°40'E, south-west Western Australia.

Habitat. Red soil on gravelly lateritic slope in eucalypt woodland.

The specific epithet 'acicularis' refers to the needle-like branchlets of this species.

Rhagodia ulicina (Gand.) Paul G. Wilson, comb. nov.

Chenopodium ulicinum Gand., Bull. Soc. Bot. France 66:224 (1919). *Type:* Mt. Lyndhurst, April 1900, M. Koch 366 (holo: LY; iso: PERTH).

Rhagodia acicularis resembles *R. ulicina*, to which it is evidently closely related, but differs in the following characters: 1) Terminal flower of female inflorescence sterile (not large and fertile), 2) Seed radially verruculose (not smooth or minutely granular), 3) Male flower with woolly stamens united into a cup-shaped disc (not glabrous and without a disc). It is a typical member of the genus and evidently related to such other typical members as *R. spinescens* R.Br. and *R. drummondii* Moq.

When Gandoger described *Chenopodium ulicinum* he was evidently unaware that the plant was dioecious and that it had baccate fruits for these two characters, and it being a shrub, firmly establish it as a member of the genus *Rhagodia*. This species is widely distributed in semi-arid areas of southern Australia from eastern New South Wales to northern Eyre Peninsula westwards to south-east Western Australia (near Cocklebidly). It frequently grows on limestone.

Acknowledgement

The illustration was kindly prepared by Margaret A. Menadue.

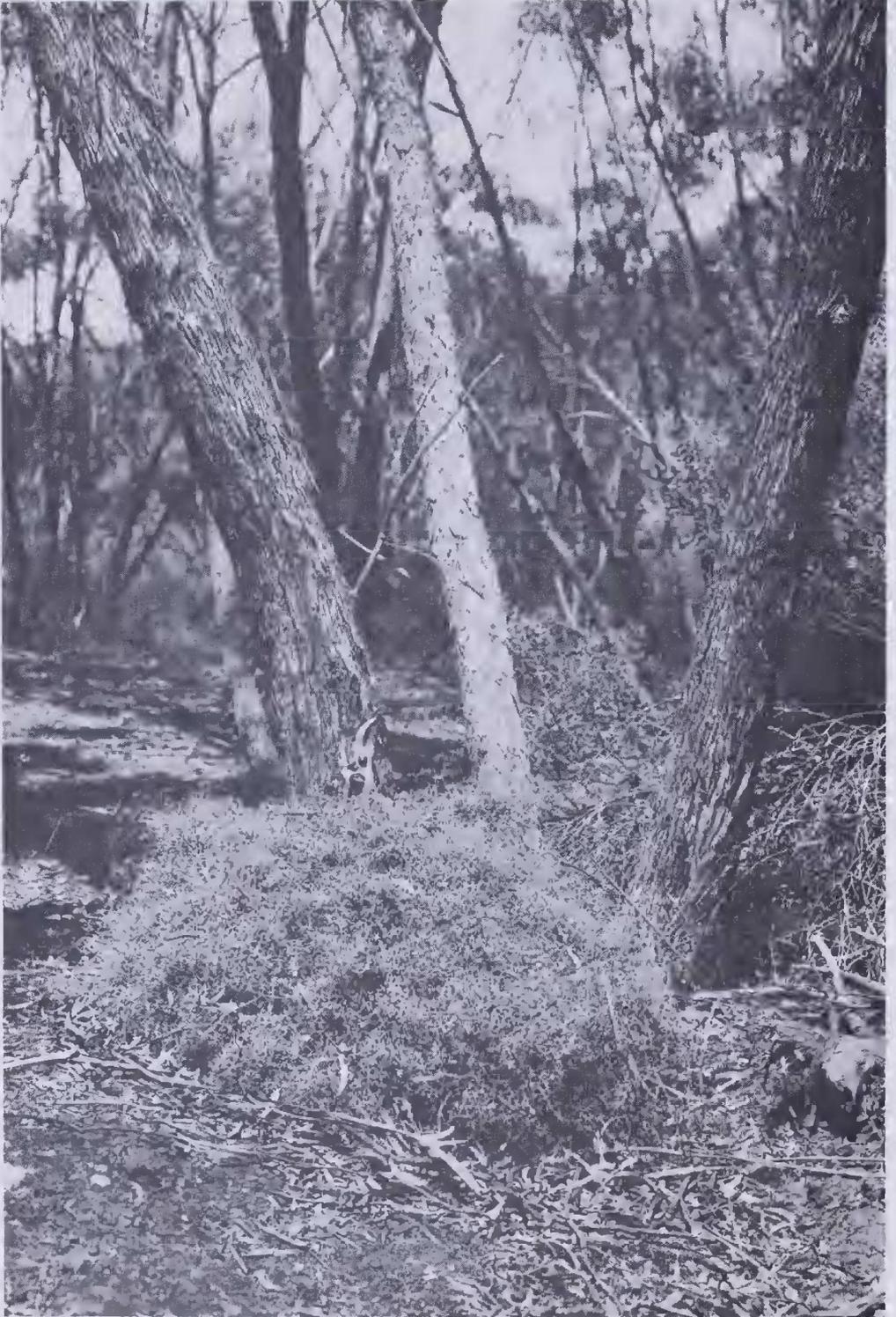


Figure 2. *Rhagodia acicularis*. Growing in the Wongan Hills. Photo of type plant by K. F. Kenneally.